15

Docket No. AUS920010758US1

#### CLAIMS:

What is claimed is:

A method in a data processing system for
 automatically tracking insertions of integrated circuit devices into a receptacle device, said method comprising the steps of:

automatically detecting, utilizing said data processing system, an insertion of an integrated circuit device into said receptacle device; and

in response to a detection of an insertion of said integrated circuit device into said receptacle device, automatically incrementing an insertion count associated with said integrated circuit device, wherein said insertion count is used to track insertions of said integrated circuit device into said receptacle device.

- The method according to claim 1, further comprising the step of automatically detecting, utilizing said data
   processing system, an insertion of an MCM assembly into a planar.
- The method according to claim 2, further comprising the step of automatically detecting, utilizing said data
   processing system, an insertion of an interposer into a planar.
- The method according to claim 1, further comprising the step of automatically detecting, utilizing said data
   processing system, an insertion of an MCM into an interposer.

5. The method according to claim 1, further comprising the step of automatically detecting, utilizing said data processing system, an insertion of an IC into a printed circuit board.

5

10

20

6. The method according to claim 1, further comprising the steps of:

providing vital product data for said IC device; establishing an insertion count field within said vital product; and

storing within said insertion count field a current number of times said IC device has been inserted into said receptacle.

15 7. The method according to claim 1, wherein the step of automatically detecting an insertion of an integrated circuit device into said receptacle device further comprises the steps of:

first detecting an absence of an integrated circuit device from said receptacle; and

next detecting a presence of an integrated circuit device in said receptacle.

8. The method according to claim 7, further comprising 25 the steps of:

first detecting an absence of a presence detect pin in said receptacle; and

next detecting a presence of a presence detect pin in said receptacle.

30

9. The method according to claim 8, further comprising the step of in response to a detection of a presence

### Docket No. AUS920010758US1

detect pin in said receptacle, incrementing an insertion count field associated with an integrated circuit device inserted into said receptacle.

5 10. The method according to claim 1, further comprising the steps of:

determining whether said insertion count exceeds an insertion threshold; and

in response to a determination that said insertion count exceeds said insertion threshold, reporting an error and a location of said integrated circuit device.

- 11. The method according to claim 10, further comprising the step of returning said integrated circuit device.
- 12. A data processing system for automatically tracking insertions of integrated circuit devices into a receptacle device, comprising:

said data processing system for automatically

detecting an insertion of an integrated circuit device
into said receptacle device; and

in response to a detection of an insertion of said integrated circuit device into said receptacle device, said data processing system for automatically

- incrementing an insertion count associated with said integrated circuit device, wherein said insertion count is used to track insertions of said integrated circuit device into said receptacle device.
- 30 13. The system according to claim 12, further comprising said data processing system for automatically detecting an insertion of an MCM assembly into a planar.

25

### Docket No. AUS920010758US1

- 14. The system according to claim 13, further comprising said data processing system for automatically detecting an insertion of an interposer into a planar.
- 5 15. The system according to claim 12, further comprising said data processing system for automatically detecting an insertion of an MCM into an interposer.
- 16. The system according to claim 12, further comprising said data processing system for automatically detecting an insertion of an IC into a printed circuit board.
  - 17. The system according to claim 12, further comprising:
- vital product data provided for said IC device; an insertion count field established within said vital product; and

said data processing system for storing within said insertion count field a current number of times said IC device has been inserted into said receptacle.

18. The system according to claim 12, wherein said data processing system for automatically detecting an insertion of an integrated circuit device into said receptacle device further comprises:

said data processing system for first detecting an absence of an integrated circuit device from said receptacle; and

said data processing system for next detecting a 30 presence of an integrated circuit device in said receptacle.

10

15

20

25

## Docket No. AUS920010758US1

19. The system according to claim 18, further comprising:

said data processing system for first detecting an absence of a presence detect pin in said receptacle; and said data processing system for next detecting a presence of a presence detect pin in said receptacle.

- 20. The system according to claim 19, further comprising in response to a detection of a presence detect pin in said receptacle, said data processing system for incrementing an insertion count field associated with an integrated circuit device inserted into said receptacle.
- 21. The system according to claim 12, further comprising:

said data processing system for determining whether said insertion count exceeds an insertion threshold; and

in response to a determination that said insertion count exceeds said insertion threshold, said data processing system for reporting an error and a location of said integrated circuit device.

- 22. The system according to claim 21, further comprising said integrated circuit device being returned.
- 23. A computer program product in a data processing system for automatically tracking insertions of integrated circuit devices into a receptacle device, said computer program product comprising:
- instruction means for automatically detecting, utilizing said data processing system, an insertion of an integrated circuit device into said receptacle device;

Docket No. AUS920010758US1

and

in response to a detection of an insertion of said integrated circuit device into said receptacle device, instruction means for automatically incrementing an insertion count associated with said integrated circuit device, wherein said insertion count is used to track insertions of said integrated circuit device into said receptacle device.

- 10 24. The product according to claim 23, further comprising instruction means for automatically detecting, utilizing said data processing system, an insertion of an MCM assembly into a planar.
- 15 25. The product according to claim 24, further comprising instruction means for automatically detecting, utilizing said data processing system, an insertion of an interposer into a planar.
- 20 26. The product according to claim 23, further comprising instruction means for automatically detecting, utilizing said data processing system, an insertion of an MCM into an interposer.
- 25 27. The product according to claim 23, further comprising instruction means for automatically detecting, utilizing said data processing system, an insertion of an IC into a printed circuit board.
- 30 28. The product according to claim 23, further comprising:

# Docket No. AUS920010758US1

instruction means for providing vital product data for said IC device;

instruction means for establishing an insertion count field within said vital product; and

instruction means for storing within said insertion count field a current number of times said IC device has been inserted into said receptacle.

29. The product according to claim 23, wherein said instruction means for automatically detecting an insertion of an integrated circuit device into said receptacle device further comprises:

instruction means for first detecting an absence of an integrated circuit device from said receptacle; and

- instruction means for next detecting a presence of an integrated circuit device in said receptacle.
  - 30. The product according to claim 29, further comprising:
- instruction means for first detecting an absence of a presence detect pin in said receptacle; and

instruction means for next detecting a presence of a presence detect pin in said receptacle.

25 31. The product according to claim 30, further comprising in response to a detection of a presence detect pin in said receptacle, instruction means for incrementing an insertion count field associated with an integrated circuit device inserted into said receptacle.

30

32. The product according to claim 23, further comprising:

Docket No. AUS920010758US1

instruction means for determining whether said
insertion count exceeds an insertion threshold; and
 in response to a determination that said insertion
 count exceeds said insertion threshold, instruction means
for reporting an error and a location of said integrated
 circuit device.